

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P640934

Luminaire Tested: ML5612LSNFL2597FS1E - 592W - 1200LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640934  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 592W - 1200LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 5" WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1569.0 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

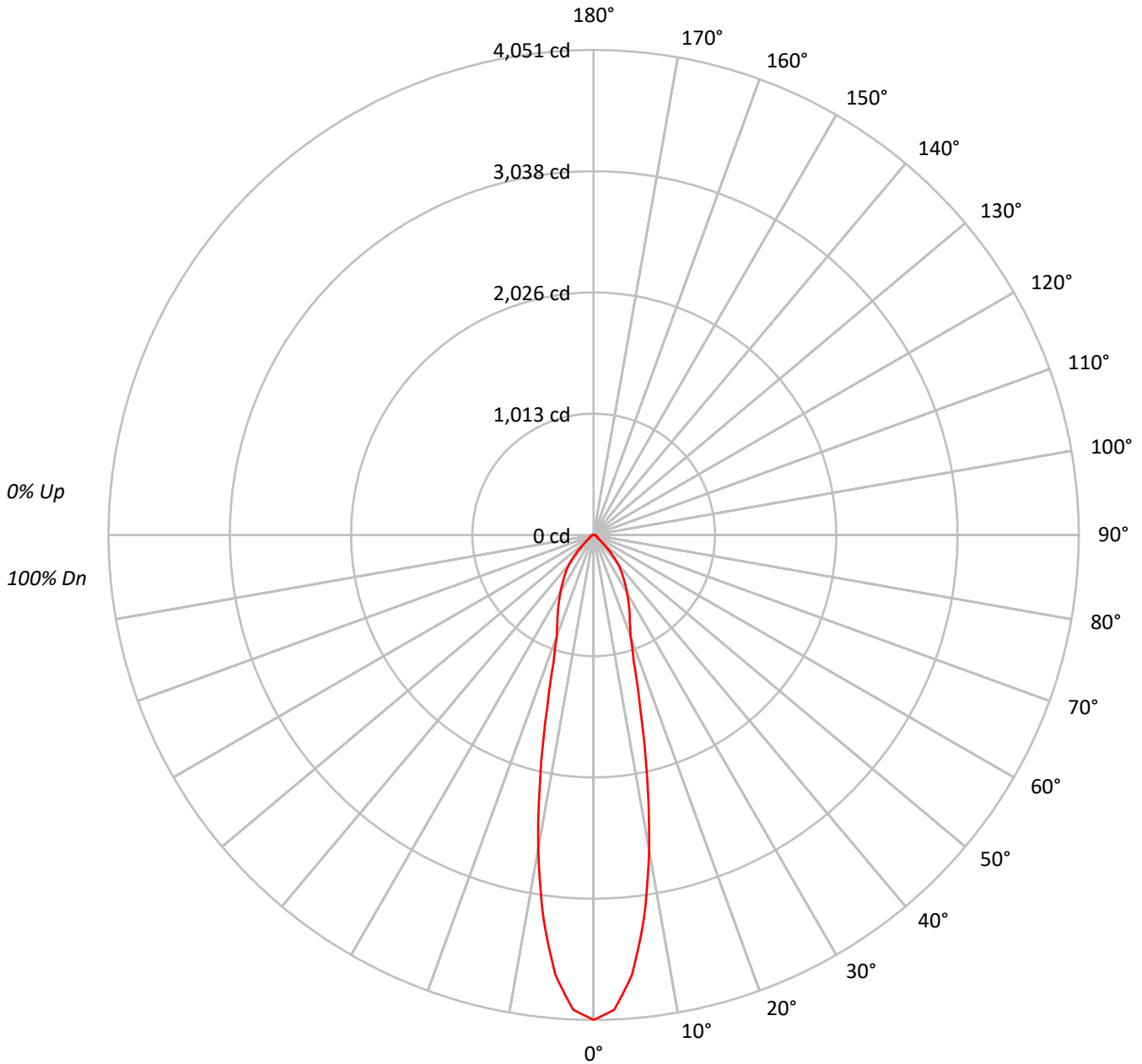
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100																
1	113	110	108	106	111	108	106	104	104	102	101	100	99	98	97	96	95	93			93																
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86			86																
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81			81																
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	79	77	75			75																
5	93	84	79	74	91	84	78	74	82	77	73	80	76	73	79	75	72	71			71																
6	88	80	74	70	87	79	73	69	77	73	69	76	72	69	75	71	68	67			67																
7	85	76	70	66	83	75	69	65	74	69	65	72	68	65	71	67	64	63			63																
8	81	72	66	62	80	71	66	62	70	65	62	69	65	61	68	64	61	60			60																
9	78	68	63	59	76	68	62	59	67	62	59	66	62	58	65	61	58	57			57																
10	74	65	60	56	73	65	59	56	64	59	56	63	59	56	63	58	55	54			54																

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	319758
5°	291953
10°	213735
15°	122695
20°	75548
25°	61720
30°	50636
35°	41236
40°	32492
45°	20117
50°	7565
55°	5780
60°	5447
65°	5043
70°	4847
75°	5033
80°	4773
85°	4076

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 20117 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	318.5	20.3
10°-20°	430.9	27.5
20°-30°	325.6	20.8
30°-40°	268.2	17.1
40°-50°	137.2	8.7
50°-60°	39.2	2.5
60°-70°	26.9	1.7
70°-80°	17.2	1.1
80°-90°	5.1	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1075.1	68.5
0°-40°	1343.3	85.6
0°-60°	1519.7	96.9
0°-90°	1569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1569.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4051	
5°	3684	319
15°	1501	431
25°	709	326
35°	428	268
45°	180	137
55°	42	39
65°	27	27
75°	16	17
85°	4	5
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4050.6
2.5°	3969.5
5°	3684.3
7.5°	3224.9
10°	2666.4
12.5°	2053.8
15°	1501.3
17.5°	1112.5
20°	899.3
22.5°	789.7
25°	708.6
27.5°	627.6
30°	555.5
32.5°	489.4
35°	427.9
37.5°	373.8
40°	315.3
42.5°	243.2
45°	180.2
47.5°	111.1
50°	61.6
52.5°	48.0
55°	42.0
57.5°	37.5
60°	34.5
62.5°	30.0
65°	27.0
67.5°	24.0
70°	21.0
72.5°	19.5
75°	16.5
77.5°	13.5
80°	10.5
82.5°	7.5
85°	4.5
87.5°	1.5
90°	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)